

CURRICULUM VITAE

Seth L. Welles, PhD, ScD
Dept. of Epidemiology
Boston University School of Public Health
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Boston, MA 02115

EDUCATION

1979 B.A. Biology, Boston University, Boston, MA
1986 Ph.D. Cellular Biology, Boston University, Boston, MA
1992 Sc.D. Epidemiology, Harvard University, Cambridge, MA
1992-95 Post-ScD/Research Associate, Biostatistics, Harvard University, Cambridge, MA

PROFESSIONAL EXPERIENCE

1985-88 **Research Associate**, Tufts University School of Medicine.

1987 **Lecturer in Cellular Biology**, College of Liberal Arts, Boston University, Boston, MA.

1988-92 **Research Assistant**, Department of Epidemiology, Harvard School of Public Health, Boston, MA.

1988-92 **Teaching Assistant**, Department of Epidemiology, Harvard School of Public Health, Boston, MA.

1989-90 **Lecturer in Nutrition**, Sargent College of Allied Health Science, Boston University, Boston, MA.

1991-92 **Teaching Assistant in Epidemiology**, Extension School, Harvard University, Cambridge, MA.

1992-95 **Research Associate/Senior Statistician**, Adult Virology Section, the Statistical and Data Analysis Center, Department of Biostatistics, Harvard School of Public Health, Boston, MA.

1993-94 **Adjunct Assistant Professor**, Department of Health, Management, and Policy, University of New Hampshire, Durham, NH.

1994-95 **Section Head**, Pediatric Virology, the Statistical and Data Analysis Center, Department of Biostatistics, Harvard School of Public Health, Boston, MA.

1994-95 **Adjunct Assistant Professor**, Department of Health and Clinical Sciences, College of Health Professions, University of Massachusetts, Lowell, MA.

- 1995-2000 **Assistant Professor**, Division of Epidemiology, University of Minnesota, Minneapolis, MN.
- 2000-01 **Associate Professor**, Division of Epidemiology, University of Minnesota, Minneapolis, MN.
- 2001-07 **Associate Professor**, Department of Epidemiology and Biostatistics, Boston University School of Public Health, Boston, MA.
- 2003-07 **Director**, Program in Lesbian, Gay, Bisexual, and Transgender Public Health Research, Boston University School of Public Health
- 2007- **Associate Professor**, Department of Epidemiology and Biostatistics, Drexel University School of Public Health, Philadelphia, PA

HONORS

- 1980-85 University Teaching Fellowship, Boston University
- 1981 Graduate Scholarship, Boston University
- 1983-84 Young Investigator Award, Innovative Research of America, Gaithersburg, MD
- 1984 Sigma Xi, Boston University Chapter, Travel Award
- 1985 Shock Society Travel Award
- 1985-86 Research Fellow Certification, Department of Pulmonary Medicine, New England Medical Center Hospitals, Boston, MA
- 1999 Inducted into Delta Omega, Pi Chapter, Society for Excellence in Public Health Research
- 2000 Promotion and tenure, University of Minnesota
- 2005 BUSPH teaching award: ‘The Changing HIV Pandemic’ EP750, Summer 2005

PUBLICATIONS

Book Chapters

Toole BP, Knudson CB, Munaim SI, Welles S, Chi-Rosso G. (1988) Hyaluronate-cell interactions and regulation of hyaluronate synthesis during embryonic limb development. In: C Abatangelo (Ed.), Cutaneous Development, Aging and Repair. Italy: Liviana Press/Fidea Research Series.

Toole BP, Knudson CB, Munaim SI, Welles S, Chi-Rosso G. (1988) Hyaluronate-cell interactions and regulation of hyaluronate synthesis during embryonic limb development. (pp.35–41). In: ZDavidovitch (Ed.), Biological Mechanisms of Tooth Eruption and Root Resorption. Birmingham, AL: Ebsco Media.

Toole BP, Knudson CB, Munaim SI, Welles S, Knudson CB. (1989) Hyaluronate-cell interactions and growth factor regulation of hyaluronate synthesis during limb development. (pp. 138-149). The Biology of Hyaluronin, CIBA Foundation Symposium, UK (vol. 143). Chichester, England: Wiley.

Mann JM and Welles, SL. (1992) Global aspects of the HIV epidemic. In: VT DeVita, SHellman, SA-Rosenberg (Eds.), AIDS: Etiology, Diagnosis, Treatment, and Treatment (pp.89-98). Philadelphia: JB Lippincott Co.

Articles in Refereed Journals

Shepro D, Welles SL, Hechtman HB. (1984). Vasoactive agonists prevent erythrocyte extravasation in thrombocytopenic hamsters. *Thrombosis Res* 35:421-430.

Welles SL, Shepro D, Hechtman HB. (1985). Vasoactive amines modulate actin cables (stress fibers) and surface area in cultured bovine endothelium. *J Cell Phys* 123:337-342.

Welles SL, Shepro D, Hechtman HB. (1985). Eicosanoid modulation of stress fibers in cultured bovine aortic endothelial cells. *Inflammation* 9:439-449.

Welles SL, Tachibana N, Okayama A, Shioiri S, Ishihara S, Murai K, Mueller NE. (1994). Decreased reactivity to PPD among HTLV-I carriers in relation to virus and hematologic status. *Int J Cancer* 56:337-340.

Welles SL, Tachibana N, Okayama A, Ishizaki J, Murai K, Shioiri S, Sagawa K, Katagiri K, Mueller NE. (1994). The distribution of T-cell subsets among HTLV-I carriers in Japan. *JAIDS* 7:509-516.

Welles SL, Tachibana N, Orav EJ, Okayama A, Ishizaki J, Mueller, NE. (1994). Changes in hematologic parameters among Japanese HTLV-I carriers. *JAIDS* 7:92-97.

Welles SL, Levine PH, Joseph EM, Goberdhan LJ, Lee S, Miotti A, Cervantes J, Bertoni M, Jaffe E, Dosik H. (1994). An enhanced surveillance program for adult T-cell leukemia in central Brooklyn. *Leukemia* 8(Suppl.1):S111-S115.

D'Aquila RT, Johnson VA, Welles SL, Japour AJ, Kuritzkes DR, DeGruttola V, Reichelderfer PS, Coombs RW, Crumpacker CS, Kahn JO, Richman DR. (1995). Zidovudine resistance and human immunodeficiency virus type 1 disease progression during antiretroviral therapy. *Annals Int Med* 122:401-408.

Fiscus SA, Welles SL, Spector SA, Lathey JL. (1995). Length of incubation times for Human Immunodeficiency Virus cultures. *J Clinical Microbiol* 33:246-247.

Hughes MD, DeGruttola V, Welles SL. (1995). Evaluating surrogate markers. *JAIDS* 10(Suppl 2): S1-S8.

Japour AJ, Welles SL, D'Aquila RT, Johnson VA, Richman DR, Coombs R, Reichelderfer P, Kahn J, Crumpacker CS, Kuritzkes DR. (1995). Prevalence and clinical significance of zidovudine resistance mutations in human immunodeficiency virus isolated from patients following long-term zidovudine treatment. *J Infect Dis* 171:1172-1179.

Lan Y, Japour AJ, Kim S, Crumpacker CS, Welles SL, McIntosh K. (1995). A rapid, direct test for zidovudine susceptibility in clinical isolates of human immunodeficiency virus type 1 (HIV-1) from infected children. *Clinical Diagnostic Virol* 3:259-271.

Coombs RW, Welles SL, Hooper C, Reichelderfer PS, D'Aquila RT, Japour AJ, Johnson VA, Kurtizkes-DR, Richman DD, Kwok S, Todd J, Jackson JB, DeGruttola V, Crumpacker CS, Kahn J. (1996). Association of plasma human immunodeficiency virus type-1 RNA level with risk of clinical progression in patients with advanced infection. *J Infect Dis* 174:704-712.

Welles SL, Jackson JB, Yen-Lieberman B, Demeter L, Japour AJ, Smeaton LM, Johnson VA, Kuritzkes DR, D'Aquila RT, Reichelderfer PS, Richman DD, Reichman RR, Fischl M, Dolin R, Coombs RW,

Kahn JO, McLaren C, Todd J, Kwok S, Crumpacker CS. (1996). Prognostic value of plasma HIV-1 RNA levels in patients with advanced HIV-1 disease and with little or no prior zidovudine therapy. *J Infect Dis* 174: 696-703.

Claxton AJ, Jacobs DR, Iribarren C, Welles SL, Sidney S, Feingold K. (1998). The association between serum total cholesterol and HIV infection in a high risk cohort of young men. *J Acq Immune Defic Synd Hum Retroviro* 17:51-57.

Welles SL, Dosik H, Joseph E, Levine PH. (1998). Undiagnosed adult T-cell leukemia/lymphoma in central Brooklyn, NY: Detection by an enhanced surveillance program. *Oncol Rep* 5:935-937.

Albert JM, Ioannidis JA, Reichelderfer P, Conway B, Coombs RW, Crane L, Demisi R, Dixon DO, Flandre P, Hughes MD, Kalish L, Larntz K, Lin D, Marschner I, Munoz A, Murray J, Neaton J, Pettinelli C, Rida W, Taylor JMG, Welles SL, for the workshop participants. (1998). Statistical issues for HIV surrogate markers: Point/Counterpoint. *Stat Med* 17:2435-2462.

Colgrove R, Pitt J, Chung P, Welles S, Japour A. (1998). Selective vertical transmission of antiretroviral resistance mutations. *AIDS* 12:2281-2288.

Moran PJ, Welles SL, Williams MA. (1998). The interrelation of maternal immune competence, HIV-1 viral load, and nutritional status in preventing vertical transmission: An alternative to chemoprophylaxis? *Med Hypotheses* 51:389-397.

Levine PH, Dosik H, Joseph E, Felton S, Bertoni M, Cervantes J, Moulana V, Miotti A, Goberdhan L, Lee SL, Daouad A, Da Costa M, Jaffe E, Axiotis C, Cleghorn F, Kahn A, Welles SL. (1999). A study of adult T-cell leukemia/lymphoma incidence in central Brooklyn. *Int J Cancer* 80:662-666.

Manns A, Wiley WJ, Wilks RJ, Morgan OSC, Hanchard B, Wharfe G, Cranston B, Maloney EM, Welles SL, Blattner WA, Waters D. Quantitative proviral DNA and antibody levels in the natural history of HTLV-1 infections. *J Infect Dis* 1999; 180(5):1487-93.

Welles SL, Pitt J, Colgrove R, McIntosh K, Chung PH, Colson A, Lockman S, Fowler MG, Hanson C, Landesman S, Moya J, Rich KC, Zorilla C, Japour A. (2000) HIV-1 zidovudine resistance and the risk of perinatal transmission in the Women and Infants Transmission Study. *AIDS* 14(3):263-271.

Perry CL, Komro KA, Veblen-Mortenson S, Bosma L, Munson K, Stigler M, Lytle L, Forster JL, Welles S. (2000) The Minnesota DARE PLUS Project: Creating community partnerships to prevent drug use and violence. *J School Health* 70(3):84-88.

Jackson T, Reddy S, Fincham J, Abd-Alla M, Welles S, Ravdin J. (2000) A comparison of cross-sectional and longitudinal seroepidemiological assessments of entamoeba-infected populations in South Africa. *Arch Med Res*; 31 (4 suppl): S36-7.

HIV Surrogate Marker Collaborative Group. (2000) Human immunodeficiency virus type 1 RNA level and CD4 count as prognostic markers and surrogate end points: A meta-analysis. *AIDS Res Hum Retrovir* 16: 1123-33.

Bauer GR, Welles SL. (2001) Beyond assumptions of negligible risk: Women who have sex with women and sexually-transmitted disease. *Am J Publ Health* 91: 1282-6

Bauer GR, Welles SL, Colgrove R, Pitt J for the WITS. Zidovudine resistance phenotype and the risk of perinatal HIV-1 transmission. *J AIDS* 2003; 34:312-9.

Ravdin JI, Abd-Alla MD, Welles SL, Reddy S, Jackson TF. Intestinal antilectin immunoglobulin A antibody response and immunity to Entamoeba dispar infection following cure of amebic liver abscess. *Infect Immun* 2003; 71:6899-905.

Colgrove RC, Millet A, Bauer GR, Pitt J, Welles SL. Gag-p6 Tsg101 binding site duplications in maternal-infant HIV infection. *AIDS Res Hum Retroviruses*. 2005; 21(3):191-9.

Winter MA, Welles SL, Holodniy M. Hepatitis C Virus Protease Gene Diversity in HIV Coinfected Patients. *J Virol* 2006; 80:4196-9.

Bauer GR, Colgrove RC, Welles SL, Pitt J, LaRussa P. Antiretroviral resistance mutations in HIV-1 transmitting mothers and their infants. *AIDS* 2006; 20:1707-12.

Welles SL, Bauer GR, Pitt J, Colgrove RC, LaRussa PS. Time trends for HIV-1 antiretroviral resistance among antiretroviral- experienced and –naïve pregnant New York City women during 1991 to Early 2001. *J AIDS* 2007; 44:329-35.

*Brennan D, Hellerstedt WL, Ross MW, Welles SL, Childhood sexual abuse and adult high risk behavior for HIV/STD infection among upper Midwest men who have sex with men enrolled in a community setting. *AJPH* 2007; 97:1107-12.

*Davies DA, Welles SL, Hellerstedt WL, Ross MW. Body Image, Body Satisfaction and Unsafe Anal Intercourse among Men Who Have Sex With Men. Accepted, in Press: *J Sex Research*

Letters

Welles SL, Mueller N, Tachibana N, Shishime E, Okayama A, Murai K, Tsuda K. Decreased eosinophil numbers in HTLV-I carriers. *Lancet* 338:987, 1991.

Hisada M, Mueller NE, Welles SL, Okayama A. Re: “Risk factors for non-Hodgkin’s lymphomas in acquired immunodeficiency syndrome (AIDS).” *Am J Epidemiol* 1997; 146:681-2.

Manuscripts in Progress

Blackard JT, Welles SL, Ackerman A, Kalia N, Cohen DE, Mayer KH. Immunologic rebound after highly active antiretroviral therapy in treatment-naïve patients. Accepted with Revision: *AIDS Res Hum Retroviruses*

Drainoni M-L, Raj A, Cozier Y, Harris C, Welles SL. Barriers and Facilitators to Providing HIV-Related Services in Churches in the African American Community: Perspectives of Religious Leaders and Community Members. Submitted: *J Urban Health*.

Raj A, Reed E, Santana, MC, Welles SL, Horsburgh CR, Flores SA, Silverman, JG. History of Incarceration and Gang Involvement Are Associated with Recent STD/HIV Diagnosis in African American Men. Submitted: *J AIDS*

Miner MH, Peterson JL, Welles SL, Jacoby S, Rosser BRS. Social Norms, Self Efficacy, and Intentions as Predictors of Unsafe Sex in HIV Positive Men Who Have Sex with Men. Submitted: *JAIDS*.

Salomon L, Welles SL, Husnik MJ, Mimiaga M, Manseau MW, Montenegro A, Huang Y, Safren SA, Koblin BA, Mayer KH. Increased depression and risky sexual practices among men who have sex with men in the EXPLORE study. Accepted with Revision: *JAIDS*

Welles SL, Gagnon JJ, Japour AJ. Predictors of low adherence to HAART among poor, urban HIV-infected men who have sex with men in Miami/Dade county. Submitted: *AIDS Care*

Welles SL, Kachur RE, McFarlane M, Rietmeijer C, Allensworth-Davies D, Ross MW. HIV/STD risk in men who have sex with men seeking internet sex partners compared with men finding partners off-line. To be submitted: *AJPH* or *JAIDS*

Welles SL, LaRussa PS, Bauer GR, Garretson A, Colgove RC, for the Women and Infants Transmission Study. Comparison of antiretroviral drug resistance patterns in plasma and corresponding peripheral blood mononuclear cell co-culture supernatants. Submitted: *AIDS Res Hum Retroviruses*

Welles SL, Raj A, Santana CM, Reed E, Horsburgh CR, Jr, Flores SA. What is sex, what is not sex, and what is sexual orientation among non-monogamous Black/African-American men attending urban health clinics. To be submitted: *AIDS*

*Student publications; Dr. Welles designed both the study itself, the analysis plan, and supervised the student in analysis and writing.

Published Abstracts

Welles SL, Shepro D, Hechtman HB. Vasoactive amines modulate endothelial cell surface area and actin cable number. *Fed Proc* 43:876, 1984.

Welles SL, Toole, BP. Fibroblast extracellular matrix modulates myoblast differentiation *in vitro*. *J Cell Biol* 105 (4, pt 2): 139a, 1987.

Welles SL, Toole BP. Fibroblast matrix stimulation of myoblast differentiation: role of laminin. *J Cell Biol* 107 (6, pt 3): 793a, 1988.

Dosik H, Welles SL, Joseph EM, Goberdahn LJ, Lee S, Miotti A, Cervantes J, Bertoni M, RothenbergS, Levine PH. Clinical features of adult T-cell leukemia/lymphoma in Brooklyn. *AIDS Research and Human Retroviruses* 10:477, 1994.

Welles SL, Dosik H, Joseph EM, Goberdahn LJ, Bertoni M, Cervantes J, Lee S, Miotti A, JaffeE, Levine-PH. Adult T-cell leukemia/lymphoma in Brooklyn (epidemiology). *AIDS Research and Human Retroviruses* 10:486, 1994.

Welles SL, Pitt J, Colgrove R, Japour AJ, for the Women and Infants Transmission Study. The role of maternal HIV zidovudine drug-resistance and total lymphocyte count in mother-infant HIV transmission. *Am J Epidemiol* 1998; 147 (Abstract 132, S33).

Other Abstracts

Welles SL, Shepro D, Alexander J'S, Hechtman HB. Vasoactive amine modulation of surface area and actin cable number in bovine aortic endothelial cells and retinal pericytes. Meeting abstract: *Third International Symposium on the Biology of the Vascular Endothelial Cell*, p.134, 1984.

Welles SL, Tachibana N, Okayama A, Ishizaki J, Mueller N. White blood cell count and HTLV-I seropositivity predict percent abnormal lymphocytes. Meeting abstract: *Third Annual Retrovirology Conference*, Hawaii, February 1990.

Welles SL, Tachibana N, Okayama A, Ishizaki J, Mueller N. Hematologic correlates of HTLV-I disease progression. Meeting abstract: *Fourth Annual Retrovirology Conference*, Jamaica, February 1991.

Welles SL, Tachibana N, Okayama A, Murai K, Shioiri S, Sagawa K, Katagiri K, Mueller NE. Alteration of T-cell subset numbers among HTLV-I carriers. Meeting abstract: *Fifth International Conference on Human Retrovirology*, Japan, May 1992.

Welles SL, Jackson JB, Yen-Lieberman B, Demeter L, Japour AJ, Johnson VA, Kuritzkes DR, D'Aquila-RA, Reichelderfer P, Richman DD, Reichman R, McLaren C, Todd J, Kwok S, Fischl M, Dolin R, Crumpacker CS. Prognostic capacity of plasma HIV-1 RNA copy number in ACTG 116A. Meeting abstract: *Second National Conference, Human Retroviruses and Related Infections*, Washington, DC, January 29-February 2, 1995, p. 96.

Levine PH, Welles S, Joseph E, Felton S, Bertoni M, Cervantes J, Moulana V, Miotti A, Goberdan L, Lee SL, Daouad A, Waters D, DaCosta M, Jaffe E, Dosik H. Clinical and Epidemiologic Features of adult T-cell leukemia/lymphoma in Brooklyn: results of a pilot project. Meeting abstract: *Second National Conference, Human Retroviruses and Related Infections*, Washington, DC, January 29-February 2, 1995, p. 158.

Welles S, Mayers D, Smeaton L, Chatis P, Greene R, Prasad V, Japour A. Potential pathogenetic mechanism for ZDV-resistant clinical isolates with robust reverse transcriptase activity. Meeting abstract: *Third Conference on Retroviruses and Opportunistic Infections*, Washington, DC, January 28-February 1, 1996, p. 114.

Welles SL, Levine PH, Dussek N, Kelly K, Felton S, Cervantes J, Dunn I, Lee S, Nayack A, Rones K, Trauber R, Manns A, Dosik H. HTLV-I and HTLV-II seroprevalences among central Brooklyn Hospital Patients. *8th International Conference on Human Retrovirology: HTLV and Related Viruses*, Rio de Janeiro, Brazil, June 9-13, 1997.

Hisada M, Welles S, Tachibana N, Okayama A, Tsubouchi H, Stuver S, Mueller N. Inverse association between the prevalence of abnormal lymphocytes and smoking among HTLV-I carriers in Japan. *8th International Conference on Human Retrovirology: HTLV and Related Viruses*, Meeting Abstracts, ED27.

Welles SL, Levine PH, Dussek N, Kelly K, Felton S, Cervantes J, Dunn I, Lee S, Nayack A, Rones K, Trauber R, Manns A, Dosik H. HTLV-I and HTLV-II seroprevalences among central Brooklyn Hospital Patients. Accepted: *8th International Conference on Human Retrovirology: HTLV and Related Viruses*, June 1997. Meeting Abstracts, ED36.

Welles S, Pitt J, Colgrove R, McIntosh K, Chung P, Colson A, Lockman S, Davenney K, Fowler M, Hanson C, Landesman S, Moye J, Rick K, Zorilla C, Japour A. Molecular ZDV-Resistance and the Risk of Perinatal HIV-1 Transmission in the Women and Infants Transmission Study. *35th Annual Meetings of the Infectious Diseases Society of America*, September 1997. Meeting Abstracts No. 18, p. 10.

Colgrove R, Pitt J, Japour A, Welles S. Evolutionary hotspot around codon 215 evolves during zidovudine exposure. Meeting Abstracts: 6th Conference on Retroviruses and Opportunistic Infections, 1999, p. 91.

Colgrove R, Pitt J, Japour A, Welles S. Zidovudine resistance after vertical transmission of HIV. Meeting Abstracts: 6th Conference on Retroviruses and Opportunistic Infections, 1999, p.118.

Bauer GR, Welles SL. Sexually transmitted diseases and bacterial vaginosis: Assessing risk from female-to-female transmission. Meeting abstract: Thirteenth Meeting of the International Society for Sexually Transmitted Diseases Research, July 1999, p. 64.

Johnson RA, Welles S, Schacker T, Carr WP, Taylor B, Hunt J, Halcon L for the Minnesota STD Research Group. The Minnesota STD prevalence study. Meeting abstract: Thirteenth Meeting of the International Society for Sexually Transmitted Diseases Research, July 1999, p. 239.

Schacker TW, Hunt J, Ashley R, Welles S for the Minnesota STD Research Group. HSV2 seroprevalence among persons with chlamydia or gonorrhea. Meeting abstract: Thirteenth Meeting of the International Society for Sexually Transmitted Diseases Research, July 1999, p. 39.

Simonton SZ, Welles SL. Determinants of the occurrence of STDs among upper Midwest men who have sex with men enrolled in a community setting. Meeting abstract: Thirteenth Meeting of the International Society for Sexually Transmitted Diseases Research, July 1999, p. 159.

Pitt J, Colgrove R, Thompson B, Japour A, Welles S. Association of maternal ZDV use during pregnancy with rapid disease progression among infants in the WITS. Presented at the 7th Annual Conference on Retroviruses and Opportunistic Infections. San Francisco, CA, January 30-February 2, 2000.

Bauer G., Pitt J, Colgrove R, and Welles S, for the WITS Study. Phenotypic Zidovudine (ZDV) resistance and perinatal HIV-1 transmission. The 8th Annual Conference on Retroviruses and Opportunistic Infections. Chicago, IL, February 4-8, 2001 (Abstract No. 711).

Kachur R, McFarlane M, Allensworth-Davies D, Welles S, Rietmeijer C, Ross M. Non Gay Identified Men who have sex with Men (NGI-MSM) & the Internet: Who are they and what are they doing? Presented: 2006 National STD Prevention Conference, Jacksonville, Florida, May 8-11, 2006.

Welles S, Allensworth-Davies D, Kachur RE, McFarlane M, Rietmeijer C, Ross M. Sexual/STD Risk in Men Who Have Sex with Men Seeking Internet Sex Partners Compared with Men Finding Partners Off-Line. Presented: 2006 National STD Prevention Conference, Jacksonville, Florida, May 8-11, 2006.

Kachur R, McFarlane M, Allensworth-Davies D, Welles SL, Cornelis Rietmeijer, Ross M. Non Gay Identified Men who have sex with Men (NGI-MSM) & the Internet. Accepted for Presentation: 11th World Congress on Internet in Medicine (Mednet'06), Toronto, Canada, Oct. 13-20, 2006.

Drainoni M-L, Raj A, Cozier YC, Harris C, Welles S. Barriers and resiliency factors associated with faith-based HIV intervention programs. Accepted: APHA 134th Annual Meeting and Exposition, Boston, MA, November 4-8, 2006.

Lawrence DA, Raj A, Santana MC, Silverman JG, Horsburgh CR, Welles S. Association of past year incarceration and past 30 day illicit drug use among Black men. Accepted: APHA 134th Annual Meeting and Exposition, Boston, MA, November 4-8, 2006.

Raj A, M, Santana MC, Welles S, Silverman JG, Horsburgh CR, Opoku J. History of Incarceration and Gang Involvement is Associated with Recent STD/HIV Diagnosis in Black Men. Accepted: APHA 134th Annual Meeting and Exposition, Boston, MA, November 4-8, 2006.

Welles S, Raj A, Santana MC, Horsburgh CR. Social and HIV/STD risk behavior correlates among black or African-American (B/AA) men who have sex with men (MSM) enrolled at Boston healthcare clinics. Accepted: APHA 134th Annual Meeting and Exposition, Boston, MA, November 4-8, 2006.

Welles S, Raj A, Santana MC, Horsburgh CR. What is sex, what is not sex, and sexual orientation among Boston black or African-American (B/AA) men in healthcare clinic settings. Accepted: APHA 134th Annual Meeting and Exposition, Boston, MA, November 4-8, 2006.

Santana MC, Silverman JG, Raj A, Welles S, Horsburgh CR. Are Black men who experience greater racial discrimination more likely to report binge drinking, drug use and substance-use related risky sex? Accepted: APHA 134th Annual Meeting and Exposition, Boston, MA, November 4-8, 2006.

INVITED TALKS/PRESENTATIONS

Title: Issues of Internal and External Validity in Retrospective Studies of Virus Load and Clinical Outcome. Meeting: Surrogate Markers of HIV/Strategies and Issues for Selection and Use, Arlington, VA, October 12-14, 1994.

Title: Prognostic Value of HIV-1 RNA Copy Number in Patients from ACTG Protocol 116B/117. Meeting: Surrogate Markers Workshop, Inter-Company Collaboration for AIDS Drug Development, Washington, D.C., September 21, 1994.

Title: Epidemiology of Adult T-Cell Leukemia/Lymphoma, and Community-Based Approaches to Studying HTLV-I Infection and Associated Morbidity. Inter-hospital Infectious Disease Group, Veterans Affairs Medical Center, Minneapolis, MN, March 13, 1996.

Title: Assessing the Quality of Published Research. Meeting: Department of Immunology, Hennepin County Medical Center, June 26, 1996.

Title: Design Considerations and Biomarkers for Epidemiologic Studies of Men Who Have Sex With Men (Invited Paper). Meeting: The American Statistical Association, Chicago, IL, August 6, 1996.

Title: Violence and Infection. The Seventeenth Annual Winter Lecture Series, Student Committee on Bioethics, University of Minnesota, March 13, 1997.

Title: There are important subgroup differences in the relationship between surrogate marker levels and disease risk. Meeting: Statistical issues for HIV Surrogate Endpoints (special NIAID-sponsored workshop), The International Biometric Society: Eastern North American Region, Memphis, TN, March 25, 1997.

- Title: Molecular ZDV-Resistance and the Risk of Perinatal HIV-1 Transmission in the Women and Infants Transmission Study, 35th Annual Meeting of the Infectious Diseases Society of America, San Francisco, Sept 13-16, 1997.
- Title: The Role of Maternal HIV Zidovudine Drug-Resistance and Total Lymphocyte Count in Mother-Infant HIV Transmission. Society for Epidemiologic Research, Chicago, June 24-26, 1998.
- Title: Public Health Today. Invited as part of a panel of public health scientists who appeared on a local Twin Cities television show “Health Talk & You”, April 6, 1999.
- Title: Antiretroviral Drug Resistance and HIV-1 Vertical Transmission. Invited presentation by NIH for the Women and Infants Transmission Study Executive Committee, Chevy Chase, MD, July 8, 1999.
- Title: Sexually Transmitted Disease in Early Adolescence: Challenges for Parents. Invited presentation for the Minnesota Organization for Adolescent Pregnancy Prevention and Parenting (MOAPP). Four Points Hotel, Minneapolis, MN, November 18, 1999.
- Title: Developing Sensitivity and Rapport with the Sexual Minority Community. Invited presentation for the Maternal & Child Health Conference, “Strategies for Understanding and Measuring Health Disparities.” Midway Sheraton Hotel, St. Paul, MN, June 8-9, 2000.
- Title: And what about sex?: Ethical dilemmas and issues in the design of screening and counseling programs for STDs and HIV among adolescents. Invited speaker for the Hennepin County School Mentor Program, Maplewood, MN, April 11, 2001.
- Title: LGBT Health and Sexual Identity. Presented for Boston University pre-orientation program for incoming freshman. August 29, 2006.
- Title: HIV/AIDS Pandemic: Update. Presented for Boston University pre-orientation program for incoming freshman. August 29, 2006.
- Title: What is Sex, What is Not Sex, and What is Sexual Orientation among Black/African-American Men Attending Urban Health Clinics? Presented to: the Slone Epidemiology Center, Boston University, December 14, 2006.

SPONSORED RESEARCH

1. Title: Brooklyn HTLV-1 Study.
Funding: American Cancer Society (Grant #EDT-94); 1/1/95-12/31/96.
Summary: Estimating seroprevalence in hospital clinic populations: general medical clinic patients, new mothers, chronic dialysis patients, and women at high risk for HIV-1 infection.
Role: Principal Investigator.
2. Title: ZDV Resistance in Maternal-Infant HIV-1 Transmission.
Funding: NIAID/NIH, RO1 AI39144-01; 9/95-9/98
Summary: This study describes the emergence of HIV-1 molecular ZDV drug resistance among mothers on ZDV therapy as part of the Women and Infant HIV-1 Transmission Study

(WITS), and assesses the role of drug-resistance in transmission of HIV-1 to infants born to these mothers.

Role: Co-Principal Investigator.

3. Title: Minnesota Department of Health STD Prevalence Study (R. Johnson, MDH, P.I.)
 Funding: State of Minnesota General Fund, 7/1/98-6/30/99.
 Summary: This was a cross-sectional survey to measure the prevalence of chlamydia, gonorrhea, human papillomavirus and herpes simplex virus-2 among adolescents attending general medicine and family planning clinics in the Twin Cities metro area and outstate.
 Role: Co-Investigator.
4. Title: Natural History of Entamoebiasis (J. Ravdin, Dept. of Medicine, P.I.)
 Funding: NIAID/NIH (U01AI35840-06), 7/1/99-6/30/00, including one year no-cost extension.
 Summary: This is the last year of a five-year, case-control study of demographic and environmental determinants of infection with Entamoeba and endstage disease, and evaluating the immunologic response to infection by E. histolytica.
 Role: Epidemiologist for study, and Co-Investigator.
5. Title: Molecular Data Center for Infectious Disease Studies.
 Funding: Academic Health Center (AHC), University of Minnesota; fall 1998.
 Summary: This was part of a large proposal to the AHC to fund a molecular sequencing facility and an analysis center at the College of Veterinary Medicine and the Division of Epidemiology, SPH. Our role in this project was to serve as the data importation and analysis center for collaborative studies between our division and the College of Veterinary Medicine.
 Role: Co-Investigator.
6. Title: Epidemiology and Molecular Virology of Oral HIV Transmission (T.Schacker, P.I.)
 Funding: NIDR/NIH, RO1 DE12934-01; 9/1/98-8/31/02.
 Summary: This three-part study will evaluate several aspects of genital-oral transmission of HIV: the role of mucosal integrity and concomitant STD infection, and viral load in HIV transmission among serodiscordant couples; early replication events *in vivo* among persons who have had a high-risk exposure and initial infection of mucosal tissue; cell entry events using an *ex vivo* model of oropharyngeal tissues and primary isolates of HIV-1.
 Role: Epidemiologist for study, and Co-Investigator.
7. Title: A Population-Based Survey of Torture and Violence (J. Jaranson, P.I.)
 Funding: NIMH/NIH, RO1 MH59579-01; 9/30/98-5/31/03.
 Summary: This is a five-year, community-based survey and case-control study of Somali and Ethiopian refugees in the Twin Cities metropolitan area with histories of government-sanctioned torture.
 Role: Epidemiologist for study, and Co-Investigator.
8. Title: Immunologic Factors in Saliva and Blood as Determinants of HIV-Related Disease (N.Wetherall, ViroMed Laboratories, P.I.)
 Funding: NIDR/NIH (RFP: NIH-NIDR-4-97-9R), Division of Epidemiology subcontract: 10/1/98-9/30/00.

Summary: This is a retrospective cohort analysis of salivary markers of HIV infection as determinants of oral HIV disease and overall disease progression. Over 2000 saliva and 2000 plasma samples collected from the U.S. Department of Defense Walter Reed Cohort will be screened and linked to the detailed clinical and laboratory database that already exists for this cohort.

Role: Co-Investigator and epidemiologist for study.

9. Title: STD Prevalence Study Enhanced Project (R. Johnson, MDH, P.I.)
Funding: CDC Grant #H25CCH504342 Catalog #93.977); 1/1/99-12/31/02.
Summary: This is an enhancement to the Minnesota Department of Health STD Prevalence Study. These additional funds will be used to study rates of STDs and determinants of infection in marginalized high-risk populations: gay and lesbian adults and adolescents, incarcerated adolescents, and homeless adolescents.
Role: Co-Investigator.
10. Title: Adjustment of Internationally Adopted Children (M. Gunnar, Institute of Child Development, P.I.)
Funding: NIMH/NIH (RO1MH59848-01), 6/1/99-5/31/03.
Summary: This is a four-year study of the effects of adoptive family emotional support, coping strategies, and social support as determinants of positive adjustment and cognitive development among adopted children in Minnesota—some of whom were adopted from abusive situations internationally.
Role: Epidemiologist for study, and Co-Investigator.
11. Title: A Community-based Evaluation of DARE and DARE Plus (C. Perry, P.I.).
Funding: NIDA/NIH (R01DA11994-02), 9/1/99-8/31/00.
Summary: This study is designed to implement and evaluate an augmented program (DARE Plus), as an alternative to the Drug Abuse Resistance Education (DARE) Program available nationally. The design for this project involves randomization of 24 Minnesota schools.
Role: Co-Investigator.
12. Title: Antiretroviral Resistance in HIV-1 Vertical Transmission
Funding: NIAID/NICHD/NIH (2RO1AI39144-04A1), 9/1/99-8/31/03.
Summary: This is a competitive renewal of our previously funded study to describe the prevalence and determinants of maternal HIV-1 genotypic ZDV drug-resistance data.
Role: Principal Investigator.
13. Title: Mucosal and Vaccine Research Center (MAVRC).
Funding: U of M Planning Initiatives in Interdisciplinary Research, Scholarly and Creative Activities (IRSCA); for 7/1/2001 to 6/30/2003
Summary: This center grant will be to develop the scientific and administrative infrastructures for a center focused on mucosal immunity and vaccine-preventable diseases. Dr. Welles was to serve as the head of the epidemiology group in this new center.
Role: Co-Investigator and Epidemiologist.

14. Title: Office of Minority Health Coalition Demonstration Grant Program – “Faith in You”
 Funding: OMH 10/1/02-9/30/05
 Summary: This project will be to develop faith-based interventions to offer compassionate referral of parishioners and community members who may be infected with HIV. The overall goal is to increase levels of community testing, and to get persons with HIV into early treatment for infection.
 Role: Co- Investigator and Scientific Director.
15. Title: HIV Risk In Non-Gay-Identifying MSM Seeking Net Sex
 Funding: ASPH/CDC, 10/01/03-9/30/05
 Summary: Epidemiologic study to measure types and rates of sexual behaviors among non-gay identifying men who have sex with men who seek sex partners on the internet. Additionally, we will measure several putative determinants of non-disclosure and high risk including racism, homophobia, and reduced self-efficacy.
 Role: Principal Investigator
16. Title: Psychosexual Risk for HIV in African-American MSM—the Minority AIDS Research Initiative (MARI): PI: Anita Raj, PhD
 Funding: CDC, 10/01/03-9/30/06
 Summary: Epidemiologic study to measure types and rates of sexual behaviors among African-American men seeking primary healthcare at several Boston Medical Center-affiliated walk-in clinics. In those men reporting same-sex behaviors, we will measure several putative determinants of non-disclosure and high risk including racism, homophobia, and reduced self-efficacy.
 Role: Co-Principal Investigator, mentor to Dr. Raj, junior investigator
17. Title: Program in Lesbian, Gay, Bisexual, and Transgender Public Health Research
 Funding: Boston University School of Public Health, 2004-
 Summary: Epidemiologic study to measure types and rates of sexual behaviors among African-American men seeking primary healthcare at several Boston Medical Center-affiliated walk-in clinics. In those men reporting same-sex behaviors, we will measure several putative determinants of non-disclosure and high risk including racism, homophobia, and reduced self-efficacy.
 Role: Director for Program
18. Title: India Men’s Sexual Health Internet Study
 Funding: Cleveland State University and the University of Texas SPH
 Summary: Epidemiologic study to measure types and rates of sexual behaviors among non-gay identifying men who have sex with men who seek sex partners on the Internet throughout India. Additionally, we will measure several putative determinants of non-disclosure and high risk including racism, homophobia, and reduced self-efficacy.
 Role: Co-Investigator

TEACHING

University of Minnesota

Courses Taught

Title: PubH 5330: Epidemiology I; taught 1996 and 1998.

Description: This is the first course in the University of Minnesota School of Public Health epidemiology methods series. This course covers all basic concepts and analytic methods, as a introduction for students concentrating in epidemiology, biostatistics, environmental health, and health services research.

Title: PubH 8379: Epidemiology IV; taught 1998 and 1999 (offered as PubH 8350 during Fall 2000)

Description: This is the last course in the School of Public Health's epidemiologic methods series, and is intended for epidemiology doctoral students. The course presents the philosophical, statistical, and epidemiological bases of causal inference. Furthermore, the role and uniqueness of modern epidemiology as a independent discipline are debated.

Title: PubH 5337: Analysis of Infectious Disease Data; taught 1996, 1997 and 1998.

Description: This course is designed as an overview of epidemiologic and statistical methods commonly employed for the analysis of infectious diseases data. These include deterministic and stochastic modeling of new infections, back-calculation and forward projection methods for predicting epidemic growth for infections with long incubation periods (HIV as the example), the impact of social networks in the spread of infection of HIV and STDs, case-control and cohort analysis, survival methods to model pathogenesis, and the theory and limitations of surrogate markers.

Title: PubH 5379: Epidemiology Master's Project Seminar; taught Intercession 2000, 2001

Description: This seminar is focused on critiquing the design and methods for the Master's project that is required to earn an M.P.H. in epidemiology. Both lecture and group exercises are used to evaluate each Master's project in terms of the rationale and background of the proposed study, the overall study design and methods, the analysis plan, and the public health impact of the proposed research.

Guest Lectures

1. **PubH 5330:** Epidemiology I; Instructor: K. Anderson. Title: *Causality*, 1998.
PubH 5320: Fundamentals of Epidemiology; Instructor: K. Anderson. Title: *Causality*, fall 1999, fall 2000.
2. **PubH 5383:** Pathobiology of Human Diseases; Instructors: R. Crow and M. Gross.
 Title: *Biology and Epidemiology of AIDS*, 1997, 1998, 1999 and 2000.
 Title: *Prognostic and Surrogate Markers for HIV-1 Disease*, 2001.
3. **PubH 5335:** Epidemiology and Control of Infectious Diseases; Instructor: A. Lifson.
 Title: *Screening for HPV Infection: Mandatory or Elective?* 1999.

Epidemiology and Control of Infectious Diseases; Instructor:
M. Desvarieux
Title: *Human Retroviruses and Leukemia*, 2000, 2001.

4. **PubH 5320:** Fundamentals of Epidemiology; Instructor: D. Lazovich.
Title: *Basic Concepts and Theory of Infectious Disease Epidemiology* 2000.
5. **PubH 5605:** Reproductive and Perinatal Health; Instructor: W. Hellerstedt.
Title: *Vertical Transmission of HIV-1*, spring 2001.

Advising:

<u>Student</u>	<u>Degree</u>	<u>Major</u>	<u>Advisor's Role</u>	<u>Completion</u>
J. Adams	MPH	EOH	Doctoral Committee Member	4/98
S. Baker	MPH	Epidemiology	Project Advisor	7/01
G. Bauer	MPH	Epidemiology	Academic Advisor	9/98
P. Bowman	MPH	Epidemiology	Project Advisor	6/99
A. Box	MPH	Epidemiology	Project Advisor	7/99
A. Buikema	MPH	Epidemiology	Project Advisor	7/01
A. Claxton	PhD	Epidemiology	Doctoral Committee Member	7/97
D. Hiatt	MPH	Epidemiology	Academic Advisor	9/99
R. Kerani	PhD	Epidemiology	Doctoral Committee Member	6/00
K. Kelley	MPH	Epidemiology	Project Advisor	9/97
K. Kugler	MPH	Community Health and Education	Project Advisor	9/01
T. Miller	MPH	Epidemiology	Project Advisor	8/99
K. Nicodemus	MPH	Epidemiology	Academic Advisor	8/00
L. Nordgren	MPH	Epidemiology	Academic/Project Advisor	8/01
D. Osmon	MPH	Epidemiology	Academic Advisor	9/98
S. Simonton	MPH	Epidemiology	Project Advisor	8/99
G. Bauer	PhD	Epidemiology	Academic Advisor	8/03

Boston University

Courses Taught

Title: EB 755 : Infectious Disease Epidemiology, Spring 2002-2004

Description: This course presents the methods of studying common infectious diseases in populations. It includes the determinants of these diseases, their distribution within populations, and their control. There are lecture presentations regarding specific diseases and agents. Implications for social policy and preventive approaches are discussed. Analysis of actual infectious disease outbreaks with classroom discussion of prepared homework is included.

Title: EP750: The Changing HIV Pandemic and the Response of Affected Communities, Summer 1 and Summer 2 2004- 2006

Description: This course is intended as a comprehensive epidemiologic overview of the evolving HIV pandemic over time, along with parallel responses by communities affected by AIDS and artists to express their sense of loss and strength through various media. These include written word, spoken word, and visual arts including painting, photography and film. Participants will follow the pandemic over time to observe the culture and expression of loss and resiliency by specific cultures within America and throughout the world. In addition, the HIV epidemic, as portrayed in literature and the arts, will be dovetailed with social epidemiologic considerations of the spread of infection and barriers to healthcare for the disease. This course is intended for individuals who have an introductory knowledge of epidemiology and public health, and who desire to build a deeper emotional and spiritual understanding of the impact of HIV within affected communities.

Title: EP871: Design and Conduct of Cohort Studies, Fall 2004, 2005-2006

Description: This is a third-level epidemiologic methods course intended for advanced Masters and Doctoral students who desire to build depth and nuance in their understanding of cohort study design and conduct. The course will build on students' foundation in basic cohort study design and measures of disease occurrence, with classic and state-of-the-art papers which focus in depth on various topics such as selection of appropriate measures of excess risk, intermediate endpoints (theory and practice), and pooled (meta) analysis. For each topic, methodologic readings will be linked back to concrete examples of cohort study design, with special emphasis on practical aspects of study conduct.

Advising:

<u>Student</u>	<u>Degree</u>	<u>Major</u>	<u>Advisor's Role</u>	<u>Completion</u>
D. Allensworth-Davies	MSc	Epidemiology	Academic/Thesis Advisor	5/04
W. Bergman	MPH	Epidemiology	Academic Advisor	
C. Bezdek	MPH	Epidemiology	Academic Advisor	
D. Christiansen	DSc	Epi and Biostat	Thesis Advisor	8/07-- tentative
K. Clayton	MPH	Epidemiology	Academic Advisor	
L. Grossman	MPH	Epidemiology	Academic Advisor	
G. Hagley	MPH	Epidemiology	Academic Advisor	
M. Holhouser	MPH	Epidemiology	Academic Advisor	9/05
K. Johnson	MPH	Epidemiology	Academic Advisor	5/06
C. Kelly	MPH	Epidemiology	Academic Advisor	
C. Lastimoso	MPH	Epidemiology	Academic Advisor	
E. Maneri	MPH	Epidemiology	Academic Advisor	
M. McLaughlin	MPH	Epidemiology	Academic Advisor	
C. Mowl	MPH	Epidemiology	Academic Advisor	12/06
R. Rathanasami	MPH	Epidemiology	Academic Advisor	
K. Raymond	MPH	Epidemiology	Academic Advisor	9/05
P. Razavi	MPH	Epidemiology	Academic Advisor	
J. Richardson	MPH	Epidemiology	Academic Advisor	12/06
M. Sandoval	MPH	Epidemiology	Academic Advisor	
J. Tran	MPH	Epidemiology	Academic Advisor	1/06
J. Wilkinson	MSc	Epidemiology	Thesis Committee	4/06

ADMINISTRATIVE RESPONSIBILITIES

University of Minnesota

Division of Epidemiology

Epi PhD Admissions Committee
Epi MPH Admissions Committee
Epi MPH MCH Admissions Committee
Computer Services Committee
Doctoral Preliminary Exam Committee
Student Research Awards Committee
Faculty Search Committees

School of Public Health

Faculty Consultative Committee
Policy Council
Strategic Planning Task Force (ad hoc member)

University-Wide

Member of the Graduate Faculty
Member of University Senate
Member of Academic Health Center's Strategic Planning Committee on Research

Boston University

Department of Epidemiology

Epidemiology Doctoral Committee

School of Public Health

Masters Program Admissions Committee
Chair, MPH Admissions Standards Committee

PROFESSIONAL SERVICE EXPERIENCE AND AFFILIATIONS

Program Reviewer: 1996, 1997 ASPH/CDC/ATSDR Internship Programs.

Editor-in-Chief Journal of Lesbian, Gay, Bisexual and Transgender Health Research, Haworth Press, Fall 2006-

Editorial Reviewer: Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology
(ongoing) JAMA
Journal of Infectious Diseases

Journal of Laboratory and Clinical Medicine
The Lancet
New England Journal of Medicine

**NIH Panels/
Study Sections**

HIV Chemoprophylaxis Focus Group, NIH, November 1996.

Statistical Issues for HIV Surrogate Endpoints, Memphis, TN, March 1997.

Special Panel (Study Section): Centers for AIDS Research (CFARs),
DAIDS/NIH, November 2001 and October 2003.

Special Panel (Study Section): Women's Interagency HIV Study (WIHS)
DAIDS/NIH, 2002.

Member, Site Visit: Review Group: Viral Epidemiology Branch (VEB), NCI,
2003, 2007

Member, CDC NCHSTP External Peer Review Panel for LEGACY, August

Member, Special Panel (Study Section): Pediatric AIDS Clinical Trials
Network, DAIDS/NIH, 2005

**Professional
Societies:**

Society for Epidemiologic Research, member, 1994 to present.

American Society for Public Health, member, 1995 to 1999, 2004-

Delta Omega, Pi Chapter, inducted 1999.

Scientific Program Chair-Elect, Lesbian, Gay, Bisexual, and Transgender
Caucus of Public Health Workers, APHA, 2006-2007